



---

---

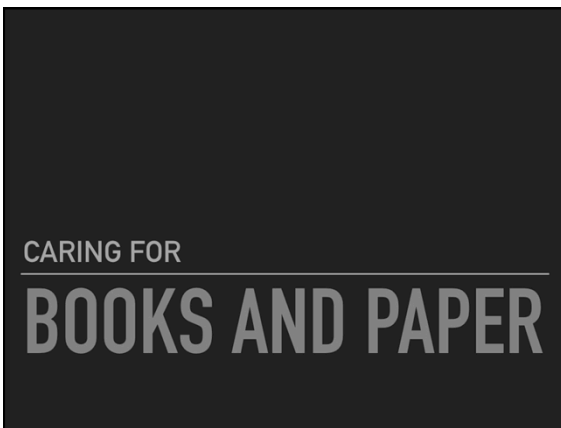
---

---

---

---

---



---

---

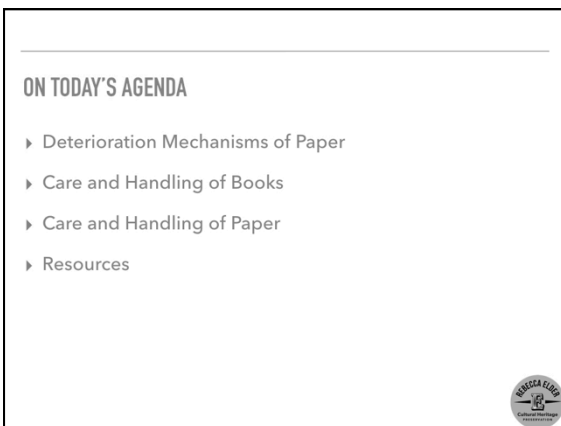
---

---

---

---

---



---

---

---

---

---

---

---



## HISTORY AND PROCESS PAPER MAKING

---

---

---

---

---

---

---

### PAPER MAKING BY HAND

- › Rags softened by fermentation (retting)
- › Rotted fibers stamped to create individual fibers
- › Fibers dispersed in water to create slurry
- › Mold and deckle dipped into slurry to form sheets
- › Sheets couched between felt and pressed
- › Wet sheets hung to dry
- › Dry sheets sized with gelatin



---

---

---

---

---

---

---

### HISTORY DRIVES CHANGE

- › The industrial revolution increased the need for inexpensive paper.
- › This led to improvements in the paper making process.
  - › Paper making machines
  - › Wood pulp paper
  - › Alum rosin size



---

---

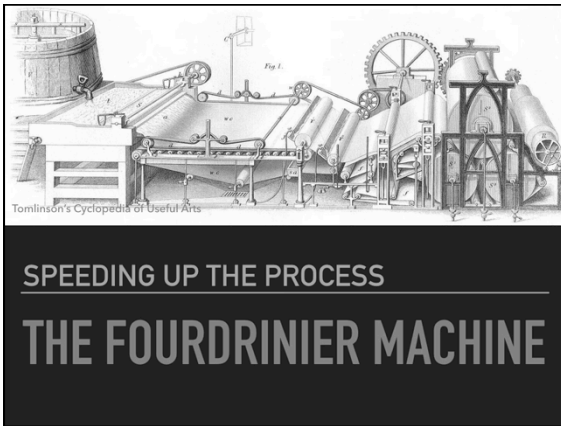
---

---

---

---

---



---

---

---

---

---

---

---



---

---

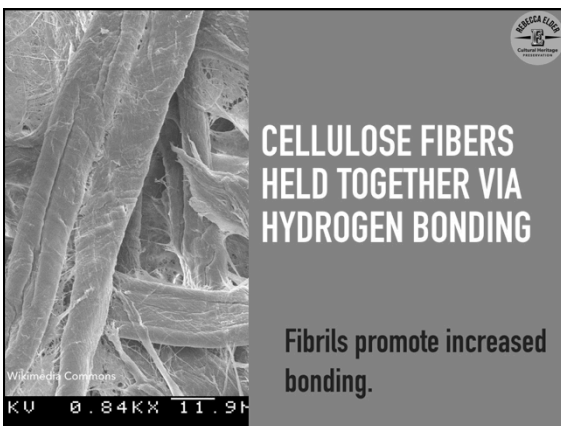
---

---

---

---

---



---

---

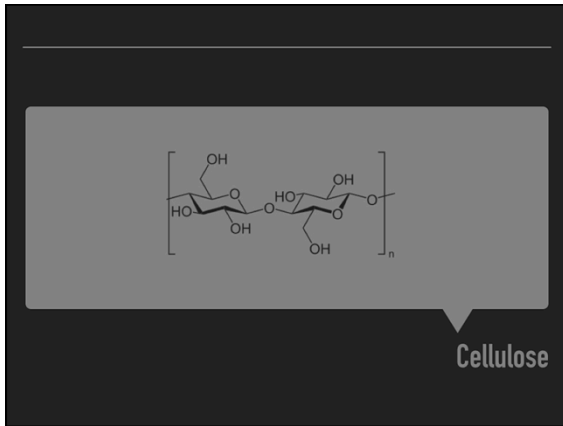
---

---

---

---

---



---

---

---

---

---

---

---



---

---

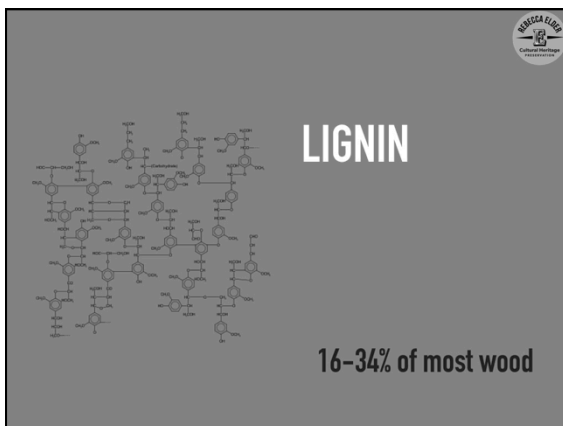
---

---

---

---

---



---

---

---

---

---

---

---

### PAPER ADDITIVES

- Whiteners
- Brighteners
- Filler
- Wet strength additives
- Sizes
  - Gelatin
  - Alum rosin




---

---

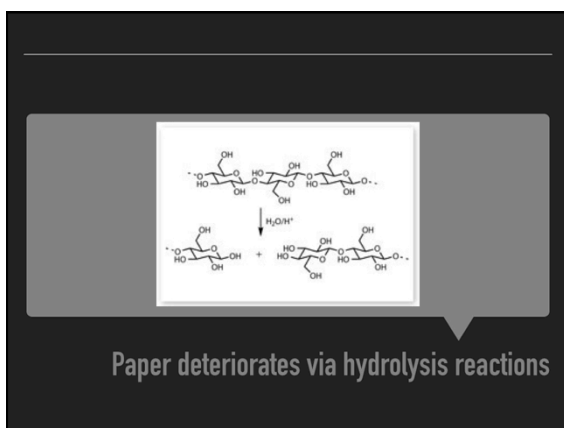
---

---

---

---

---




---

---

---

---

---

---

---

### A NOTE ABOUT ACIDIC PAPER

- Prevalent from mid-18th century until 1960s-70s.
- The more acidic your paper, the more hydrolysis reactions you have.
- The more hydrolysis reactions you have, the more brittle your paper.
- But just because paper is brittle does not mean that it is in immediate danger.




---

---

---

---

---

---

---




---

---

---

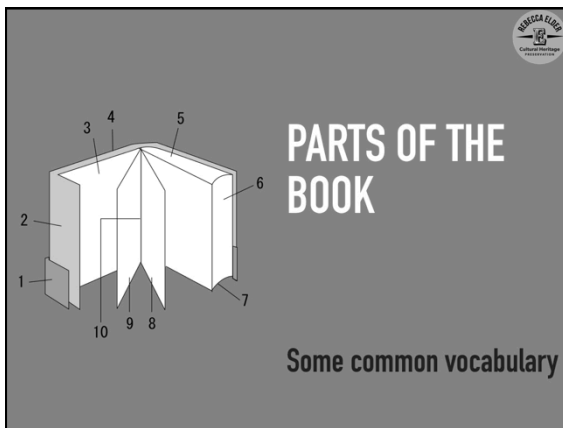
---

---

---

---

---




---

---

---

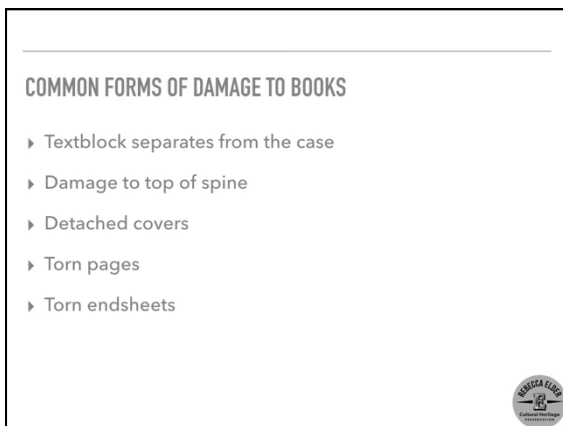
---

---

---

---

---




---

---

---

---

---

---

---

---

## SHELVING BOOKS

- › Make sure that books are straight up and down on the shelves.
- › Use bookends to keep shelves tidy and books from leaning.
- › Shelf books by size.
- › If a book is too large to fit on the shelf, shelf spine down or with oversized materials.
- › Remove books from shelf by pushing the volumes on either side back and pulling from the spine.
- › Avoid wooden shelving.




---

---

---

---

---

---

---

---

## SHELVING OVERSIZED BOOKS

- › Oversized books should be shelved horizontally.
- › Ideally, shelf no more than three high.
- › Shelf the largest book on the bottom.
- › Remove individually to reach books at bottom.
- › Always transport on book trucks.




---

---

---

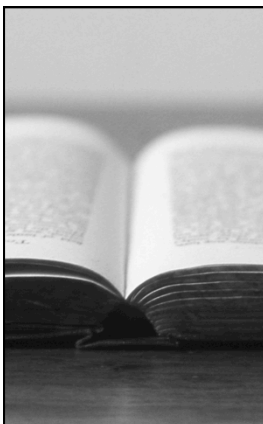
---


---

---

---

---





## USING BOOKS

How does the book open?

---

---

---

---

---

---

---

---



---

---

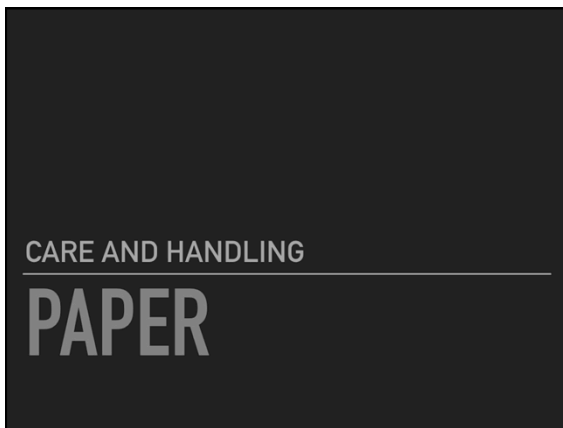
---

---

---

---

---



---

---

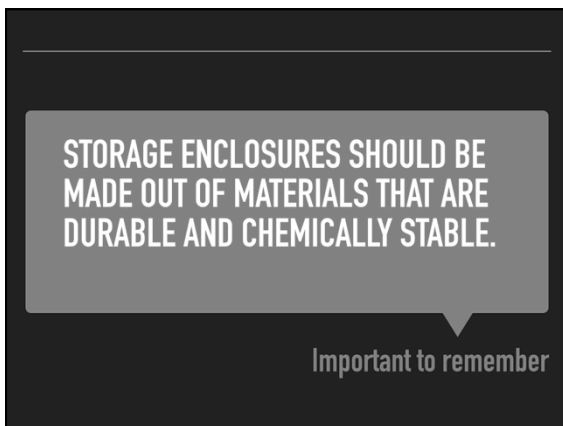
---

---

---

---

---



---

---

---

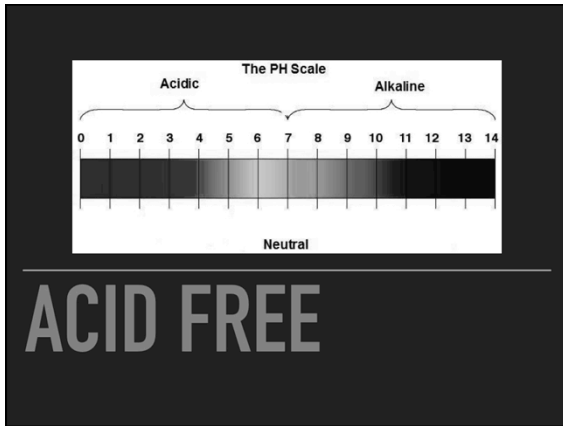
---

---

---

---






---

---

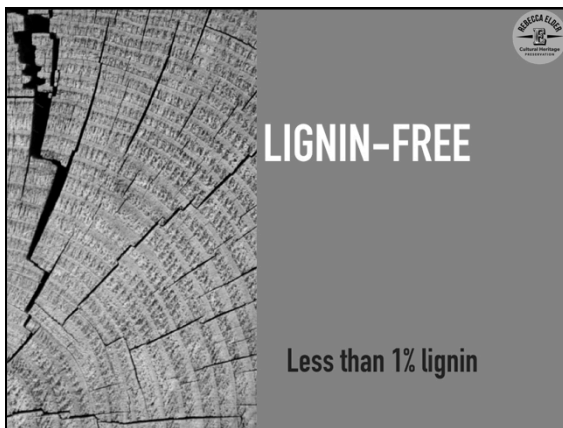
---

---

---

---

---




---

---

---

---


---

---

---

**ALKALINE BUFFERED**

- › Contains a chemical reserve that neutralizes acids as they form.
- › Not suitable for:
  - › Textiles
  - › Art with dyes and pigments
  - › Metal




---

---

---

---

---

---

---

**ONE WORD: PLASTICS**

- ▶ 3 acceptable plastics
  - ▶ Polyester (Mylar)
  - ▶ Polypropylene
  - ▶ Polyethylene
- ▶ Never use polyvinyl chloride (PVC).



Hollinger Metal Edge

---

---

---

---

---

---

---

**THE CLOSER THE ENCLOSURE IS TO THE COLLECTION ITEM, THE MORE IMPORTANT QUALITY BECOMES.**

*A rule of thumb*

---

---

---

---

---

---

---

**LAYERS OF SUPPORT**

- ▶ Primary - box
- ▶ Secondary - folder
- ▶ Tertiary - sleeve




---

---

---

---

---

---

---



---

---

---

---


---

---

---

**OVERSIZED BOXES**

- ▶ Drop front boxes with telescoping lids are best.
- ▶ Use for oversized and extremely fragile materials.
- ▶ Come in a range of sizes large enough to hold unfolded newspapers.



gayford.com

---

---

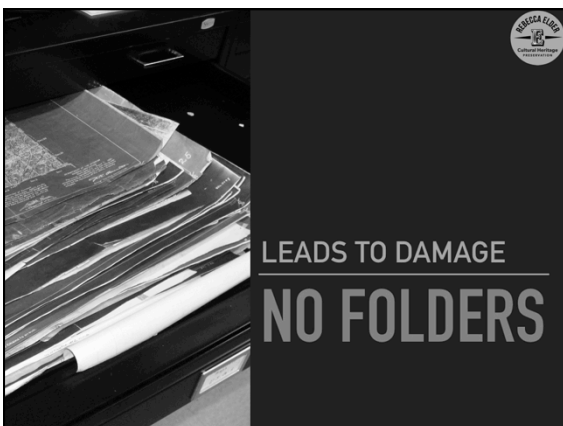
---

---

---

---

---



---

---

---

---

---

---

---

### FOLDERS FOR BOXES AND FLAT FILES

- › Can be standard folder stock or reinforced.
- › Choose folders slightly smaller than boxes
- › Consider the application and sturdiness of folders.



gaylord.com

---

---

---

---

---

---

---



## POLYESTER SLEEVES

**Protection for your most fragile paper**



---

---

---

---

---

---

---

### HOUSING LOOSE PAPER

- › Make sure your boxes and folders are in good condition.
- › Place paper into folders before putting into boxes.
- › Make sure your boxes are properly filled.
- › Always label boxes in pencil.
- › Separate oversized documents and store flat.
- › A separation slip will help you maintain archival order.




---

---

---

---

---

---

---

## ROLLED DOCUMENTS

- › Flat storage is preferable to rolled storage.
- › Roll around acid-free tubes.
- › Wrap in acid-free paper or Mylar to protect from dirt.
- › Shelf flat.




---

---

---

---

---

---

---

---

## RESOURCES

- › THC's Collections Care for Small Museums resource list
- › Sustainable Heritage Network
- › Ritzenhaller's *Preserving Archives and Manuscripts*
- › Harvey & Marhard's *The Preservation Management Handbook*




---

---

---

---

---

---

---

---

## THANK YOU!

- › Let's stay in touch!
  - › [rebecca@elderpreservation.com](mailto:rebecca@elderpreservation.com)
  - › [www.elderpreservation.com](http://www.elderpreservation.com)
- › THC Museum Services
  - › Laura Casey  
([laura.casey@thc.state.tx.us](mailto:laura.casey@thc.state.tx.us))
  - › Tricia Blakistone  
([tricia.blakistone@thc.state.tx.us](mailto:tricia.blakistone@thc.state.tx.us))




---

---

---

---

---

---

---

---